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Essays in Corporate Social Responsibility

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Contents

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0.2 Introducción

Esta tesis de investigación se compone de tres partes principales que analizan la responsabilidad social empresarial (RSE) de las empresas públicas. Cada parte ofrece un análisis empírico relacionado con el tema de la RSE y su papel en las organizaciones. Mi motivación para estudiar la RSE radica en la creciente importancia de la participación de las empresas en acciones de responsabilidad social y en el desacuerdo de los beneficios de las acciones de RSE en la literatura previa. Estudio la responsabilidad social corporativa con el fin de hacer frente a estos resultados contradictorios y llenar una importante laguna de investigación enfocando la RSE desde una nueva perspectiva que identifica un alineamiento óptimo entre las necesidades de las partes interesadas y las inversiones de las empresas en acciones de RSE.

La primera parte de la tesis analiza la relación entre las donaciones caritativas y el fracaso en los esfuerzos de publicidad de las empresas. Las donaciones caritativas es una forma común de la filantropía corporativa y representa las iniciativas "altruistas" de las empresas. Sostengo que las empresas que invierten en este tipo de acciones quieren señalar una buena imagen de la empresa hacia sus grupos de interés. La dificultad de las empresas de participar en acciones filantrópicas es medir sus resultados. Propongo que las acciones sociales corporativas ofrecen beneficios intangibles para las empresas, que pueden ser medidos, por ejemplo, en una disminución del fracaso de los esfuerzos de publicidad de la empresa. Uso un conjunto de datos de panel de 167 grandes empresas estadounidenses de la lista S & P 500 que cubre un período de nueve años. Mido los esfuerzos de publicidad de marcas comerciales que han fracasado como marcas comerciales abandonadas registradas en la base de datos Oficina de Patentes y Marcas (USPTO). Esta medida es novedosa en la literatura de gestión estratégica. Utilizo los datos de Kinder, Lydenberg, y Domini así como la base de datos (KLD) para medir las donaciones caritativas de las empresas, expresadas con una variable binaria que toma el valor 1 si la empresa siempre ha dado más que 1,5% del final de tres años los ingresos netos antes de impuestos a las donaciones caritativas, o ha sido especialmente generosos en sus donaciones, y 0 en caso contrario. Los datos financieros para controlar los factores adicionales los obtuve de la base de datos Compustat. Utilizo el método de regresión binomial negativa dada la variable dependiente y la desigualdad media-varianza. La prueba de Hausman mostró que la especificación de efectos fijos es correcta en mi modelo, por lo tanto, usamos los efectos fijos de las empresas y a través del tiempo. Los resultados muestran evidencia de una relación positiva entre las donaciones caritativas y una disminución del fracaso en los esfuerzos de publicidad de las empresas. La explicación de esta relación positiva radica en la capacidad de las acciones sociales de las empresas para crear un fondo de maniobra positivo moral (Godfrey, 2005) entre los grupos de interés para que así la empresa proteja e incremente los activos intangibles de la empresa.

La segunda parte de la tesis se centra en las presiones de grupos de interés y su efecto en las inversiones en RSE de las empresas. Los grupos de interés pueden actuar como agentes institucionales y pueden influir en las empresas para participar en acciones de RSE (por ejemplo, movimientos sociales). En este estudio me centro en la geografía de las diferentes presiones de los grupos de interés de la empresa y su relación con las acciones de la empresa en RSE. Distingo los grupos de interés de la empresa entre internos, locales exteriores y globales exteriores, los cuales pueden influir en las decisiones de la empresa con el fin de invertir en acciones altruistas e innovadoras de RSE. Sostengo que los grupos de interés, dada su ubicación geográfica, pueden ejercer diferentes presiones sobre las empresas. Las empresas, dada la geografía de las presiones, toman en cuenta las características de sus acciones altruista e innovadoras en RSE con el fin de elegir la mejor respuesta. Las tres características que las empresas consideran al elegir las acciones de RSE son la visibilidad, la estructura de costos y las limitaciones de tiempo. Mi hipótesis es que la presión de los grupos de interés internos, representados por los empleados, animará a las empresas a invertir en innovación y no en acciones altruistas de RSE. Los empleados son menos sensibles a las limitaciones de tiempo y los costos involucrados, por lo que valoran más las iniciativas de las empresas que proporcionan una ventaja a largo plazo, como las acciones innovadoras de RSE. También conjeturo que la presión local externa proveniente de grupos locales de las ONG puede tener objetivos diferentes, y las empresas consideran la inversión en acciones altruistas e innovadoras en RSE. Las acciones altruistas son útiles cuando los grupos locales requieren una respuesta rápida que necesita menos recursos y más visibilidad pública. Las acciones innovadoras son adecuadas si las presiones de las ONG locales perduran en el tiempo y requieren una solución a largo plazo, lo que requiere más recursos invertidos y un marco de tiempo más largo. Es más, la hipótesis de que la presión externa mundial proviene de los problemas de derechos humanos animará a las empresas a invertir en acciones altruistas de RSE. En este caso las acciones altruistas de RSE son adecuadas porque la empresa se enfrenta a una presión lejana, y con el fin de responder a ella, las empresas optan por la solución más rápida y visible para el público. Para estudiar estas hipótesis utilizo un conjunto de datos de panel de nueve años que incluyen 151 empresas de las 500 de las empresas más grandes de Estados Unidos que cotizan en S & P. Las fuentes de datos fueron las bases de datos de KLD, Wango, y Compustat. Uso el modelo de regresiones de 'ecuaciones aparentemente no relacionadas' con un enfoque metodológico. Los resultados confirman nuestras hipótesis y también proporcionan evidencia sobre las presiones de las partes interesadas dado un determinado lugar geográfico que afecta a las acciones de las empresas en RSE de manera diferente.

La tercera parte de la tesis consiste en un análisis empírico sobre la relación entre la RSE y los resultados empresariales. La literatura previa en el ámbito de la gestión empresarial abordó esta relación y encontró resultados mixtos (McWilliams y Siegel, 2000; Orlitzky et al, 2003;. Waddock y Graves, 1997). Los investigadores encontraron una relación positiva, negativa o neutral entre la RSE y los resultados empresariales. Los argumentos de estos diferentes resultados se encuentran, por ejemplo, en las diferencias en las fuentes de datos, la metodología y los antecedentes teóricos. Por lo tanto, en mi investigación exploro esta pregunta abierta y me centro en la relación entre la RSE y los diferentes resultados financieros al nivel de empresa. Además, también conecto la RSE a los esfuerzos publicitarios de los de las empresas. Dicho de otra manera, aplico dos categorías diferentes de las variables de resultados (financieros y publicitarios) para observar los beneficios de las acciones de RSE relacionados de acuerdo a medidas tangibles e intangibles de las empresas. En particular, utilizo las siguientes medidas financieras: retorno sobre activos, retorno sobre el capital, retorno sobre las ventas, y la q de Tobin. Para medir los esfuerzos de publicidad utilizo datos anuales sobre las marcas comerciales de las empresas. Basándose en la literatura anterior, conjeturo una posible una relación positiva, negativa, y neutra entre la

RSE y los resultados empresariales. Es más, conjeturo una relación positiva entre la RSE y los esfuerzos publicitarios de las empresas. Uso un conjunto de datos de panel de un período de nueve años, que incluye 153 empresas del S & P 500. Para construir mi conjunto de datos y analizar mis hipótesis utilizo cuatro bases de datos secundarias: el KLD, la USPTO, la calificación de reputación de la revista Fortune y las base de datos Compustat. Uso la metodología OLS para testar mi primera hipótesis, y la regresión binomial negativa para testar mi segunda hipótesis. Los resultados muestran que la RSE se relaciona negativamente con el rendimiento de las empresas financieras. Este descubrimiento no sugiere que las empresas no deberían invertir en acciones de RSE, sino que refuerza las premisas de una evaluación estratégica de la RSE con el fin de proporcionar beneficios tangibles. Argumento que esta relación negativa puede ser debida al hecho de que las empresas perciben la RSE como un coste inicial con el fin de construir una ventaja competitiva a largo plazo. Además, las acciones de RSE no se pueden relacionar directamente con los beneficios financieros de las empresas, sino más bien con otras medidas de resultado como, por ejemplo, los esfuerzos de publicidad de las empresas. Por lo tanto para proporcionar evidencia de esta hipótesis nos fijamos en la relación entre la RSE y los esfuerzos de publicidad de las empresas y encuentramos que están positivamente relacionados entre sí. Este hallazgo confirma nuestra idea inicial acerca de la capacidad de la RSE para proporcionar beneficios intangibles de las empresas.

0.3 Introduction

The current research thesis consists of three main parts, which analyze the corporate social responsibility (CSR) of public firms. Each part provides an empirical analysis related to the subject of CSR and its role in the organizations. My motivation to study CSR lies in the increasing importance of firms' engagement in socially responsible actions and in the disagreement of the benefits of CSR actions in the prior literature. I study corporate social responsibility in order to address these conflicting findings and to fill an important research gap by approaching CSR from a new perspective that identifies an optimal alignment between stakeholder needs and firm investments in CSR actions.

The first part of the thesis analyses the relationship between charitable giving and failure in the advertising efforts of the firms. Charitable giving is a common form of corporate philanthropy and represents 'altruistic' initiatives of the firms. I argue that those firms which invest in such actions want to signal a good firm image towards their stakeholder groups. The difficulty for firms when engaging in philanthropic actions is to measure their outcome. I propose that corporate social actions provide intangible benefits for the firms, which can be for instance measured by a decrease in the failure of the firm's advertising efforts. I use a panel dataset of 167 large U.S. firms from the S&P 500 firms list covering a nine years period. I measure failed advertising efforts by abandoned trademarks from the United States Patent and Trademark Office (USPTO) database. This measure is novel in the strategic management literature. I use data from the Kinder, Lydenberg and Domini database (KLD) to measure charitable giving of the firms, expressed as binary variable, taking the value 1 if the firm has consistently given over 1.5 % of trailing three-year net earnings before taxes to charity, or has been notably generous in its giving, and 0 otherwise. Financial data to control for additional factors was obtained from the Compustat database. I use negative binomial regression method given the count dependent variable and the mean-variance inequality. The Hausman-test approved that the fixed-effect specification is correct in my model, therefore we use firm and time fixed effects. The results show evidence about a positive relationship between charitable giving and decreased failure in the advertising efforts of the firms. The explanation of this positive relationship lies in the ability of corporate social actions to create a positive moral capital (Godfrey, 2005) among stakeholders for the firm to protect and increase the firms intangible assets.

The second part of the thesis focuses on the stakeholder pressures and their affect on the CSR investments of the firms. Stakeholder groups can act as institutional actors and can influence firms to engage in CSR actions (e.g. social movements). In this study I focus on the geography of the different stakeholder pressures and their relationship to the firms CSR actions. I consider internal, local external and global external stakeholders which can influence firm decisions in order to invest in altruistic and innovative CSR actions. I argue that stakeholder groups, given their geographic location, can assert different pressures on the firms. Firms, given the geography of the pressures, take into account certain characteristics of their altruistic and innovative CSR in order to choose a best response. The three characteristics that firms consider when choosing CSR actions are the visibility, the cost structure and the time constraints. I hypothesize that pressure from internal stakeholder groups, represented by the employees, will encourage firms to invest in innovative rather than altruistic CSR actions. Employees are less sensible to time constraints and to the costs involved and therefore value more those initiatives of the firms that provide a long-term advantage, such as innovative CSR. I also hypothesize that local external pressure coming from local NGO groups have different aims and firms consider investing in both altruistic and innovative CSR actions. Altruistic actions are useful when local groups require a quick answer that needs less resources and more public visibility. Innovative actions are suitable if local NGO pressures are persistent and require a long-term solution, which infers more resources invested and a longer time frame. Moreover, I hypothesize that global external pressure coming from human rights concerns will encourage firms to invest in altruistic CSR actions. In this case altruistic CSR actions are suitable because the firm faces a distant pressure, and, in order to respond to it, the firm choses the most publicly visible and quicker solution. To study these hypotheses I use a panel dataset over nine years and include 151 firms from the S&P 500 list of the largest U.S. firms. The data sources were the KLD database, Wango database and the Compustat database. I use the seemingly unrelated regressions equations model as a methodological approach. The results confirm our hypotheses and provide evidence about stakeholder pressures given a certain geographic location affecting differently firm CSR actions.

The third part of my thesis consists of an empirical analysis about the relationship between CSR and firm performance. Prior literature in the field of management approached this link and found mixed results (McWilliams and Siegel, 2000; Orlitzky et al., 2003; Waddock and Graves, 1997). Researchers found positive, negative or neutral relationship between CSR and firm performance. The arguments of these different results lie for instance in the differences in data sources, methodology and theoretical background. Therefore, I address this question in my research and focus on the relationship between CSR and different financial outcomes on the firm level. Additionally, I also connect CSR to the the advertising efforts of the firms. To put it differently, I apply two different categories of outcome variables (financial and advertising) to observe the benefits of CSR actions related accordingly to tangible and intangible firm measures. In particular, I use the following financial measures: return on assets; return on equity; return on sales; and Tobin's q. To measure advertising efforts I use data on filed trademarks of the firms on a yearly basis. Relying on the prior literature, I hypothesize a possible positive, negative and neutral relationship between CSR and firm performance. Moreover, I hypothesize a positive relationship between CSR and the advertising efforts of the firms. I use a panel dataset of a nine year period and include 153 firms from the S&P 500 list of firms. To construct my dataset and analyze my hypotheses I use four secondary databases, namely, the KLD, the USPTO, the Fortune's reputational rating and the Compustat databases. I use ordinary least squares methodology to observe my first hypothesis and negative binomial regression to observe my second hypothesis. The results show that CSR is negatively related to the firms' financial performance. This finding is not suggesting that firms should not invest in CSR actions, but rather strengthens the premises of a strategic assessment of CSR in order to provide tangible benefits. I argue that this negative relationship can be due to the fact that firms perceive CSR as an initial cost in order to build a long term competitive advantage. Also, CSR actions may not be directly related to the financial benefits of the firms but rather to other outcome measures, for instance, the advertising efforts of the firms. Therefore to provide evidence on this hypothesis we look at the relationship between CSR and the advertising efforts of the firms and find that they are positively related to each other. This finding confirms our initial idea about the ability of CSR to provide intangible benefits for the firms.

Chapter 1

Corporate Charitable Giving and Advertising Efforts

Abstract

The increasing public attention towards large corporations highlights the importance of stakeholder management. Building a strong relationship with stakeholders is one of the main reasons why firms engage in corporate social responsible (CSR) actions. CSR may act as an insurance against negative occurrences and protects the firm from negative public reactions. We aim to provide empirical evidence on this conceptualization. In particular, we hypothesize that a firm's contribution to charitable giving mitigates unsuccessful advertising efforts that are often related to new product introduction. Moreover, we analyze whether this relationship is more visible in industries that focus primarily on individual consumers.

Keywords: corporate philanthropy; moral capital; trademark

1.1 Introduction

Large firms are often objects to public evaluation regarding their behavior and actions with their stakeholder groups. For this reason a valuable corporate identity is essential for the firms to ensure their existence in the long run. A strong identity can nurture an overall good reputation, strengthen stakeholder relationships, and increase firm performance (Fombrun, 1996). In order to achieve and maintain a strong firm identity, firms often engage in corporate social activities.[1]

Previous theoretical (Donaldson and Dunfee 1994; Garriga and Melé 2004; Margolis and Walsh, 2003; Porter and Kramer, 2002) and empirical research (Burke and Logsdon, 1996; Carroll et al., 1987; Hillman and Keim, 2001; Husted and Allen, 2007; Orlitzky et al., 2003; Waddock and Graves, 1997) on corporate social responsibility (CSR) is exhaustive. However, we find ambiguous results. In particular, researchers found themselves in disagreement on the aim and outcome of corporate social activities (Garriga and Melé, 2004; Margolis and Walsh, 2003).

The influential theoretical work by Godfrey (2005) tackles these issues and finds that, strategic philanthropy, in general, creates a positive moral capital among stakeholder groups. The moral capital itself acts as insurance-like protection for the firm to preserve relational based intangible assets.

Following Godfrey's theory, we argue in our study that consumers, when making product choices, favour those firms which are investing in corporate philanthropic activities.

[1] A recent example is the large U.S. company, PepsiCo - This company invested 4.1 million dollars over the past three years in the Waterpartner's Water Credit program to help solve the world's water and sanitary problems as part of the Global Water Challenge -. The Global Water Challenge is a coalition of 24 leading world companies, including Coca-Cola, Dow-Chemical and Procter & Gamble among others, contributing to the same cause in collaboration with foundations, NGOs and research organizations (CECP, 2009).

We aim to provide empirical evidence about this assumption and analyze the relationship between corporate philanthropic activities and unsuccessful advertising efforts of firms that are also often related to new product introduction. We hypothesize that those firms that are highly involved in charitable giving - a well-known form of corporate philanthropy - will experience less failure in their advertising efforts, represented by 'failed' trademarks. Also, we hypothesize that this relationship is stronger for firms that focus on individual consumers rather than for those firms which are primarily targeting business entities as their focal consumers.

Our firm sample focuses on large public firms located in the U.S. We use the Kinder, Lindenbergh and Domini (KLD) database to measure corporate philanthropy. The United States Patent and Trademark Office (USPTO) serves us to measure failure in advertsing efforts (represented by failed trademarks). We test our hypotheses using the negative binomial regression model. Our results partially confirm our hypotheses. We find evidence about corporate philanthropic involvement reducing failure in advertising outcomes (trademarks) of the firms. However, we find no evidence regarding a stronger effect for firms targeting individual consumers.

In the following sections we first give a theoretical orientation of our paper, then we state our hypotheses and describe our methodology, and lastly we present our results and conclude on our findings.

1.2 Theoretical background

1.2.1 Strategic philanthropy

In the prior literature on corporate social responsibility there exist an ongoing debate about how CSR can contibute to the firms goals (Orlitzky et al., 2003; Margolis and Walsh, 2003). A general discussion among researchers point out the relationship between CSR and firm performance. For instance, while Aupperle et al. (1985) found a negative relationship between social responsibility and financial performance, Hillman and Keim (2001) obtained mixed results on how stakeholder management and social issue participation affect shareholder value. A meta-analysis covering 52 studies by Orlitzky et al. (2003) concluded an overall positive relationship between a firm's social actions and financial performance.

Researchers claim that the differences in prior empirical findings are due to the lack of a well-defined theoretical grounding (Carroll, 1999; Garriga and Melé, 2004; Ullmann, 1985). Researchers apply a variety of theoretical views from different research fields, such as, economics, psychology or strategic management to study the contribution of CSR (Ullmann, 1985). Among these different theoretical approaches, a convergent view is the perception of CSR as a strategic resource for the firm (Godfrey, 2005; Porter and Kramer, 2006). The idea of strategic philanthropy is based on the use of CSR actions as a strategic resource and lies in the value creation ability of CSR with mutual benefits, both, for the firm and for the society. In our current study we apply this view as our theoretical background to analyze the relationship between charitable giving and the failure in the advertising efforts of the firms that is often related to new product introduction. Strategic philanthropy was described in the influential study of Porter and Kramer (2006). The authors argued that philanthropy becomes benefitial for the firms at the point where the economic and social benefits converge. This indicates that those firms which engage in philanthropic actions motivated by a strategic purpose achieve better performance compared to those firms which have purely altruistic motivations. In our case, we argue that firms which engage in charitable giving - a common form of corporate philanthropy - and do this by aligning philanthropic actions with firm objectives will experience intangible benefits by a more effective advertising for their products. This benefit will lie in the premise of improving stakeholder relations through creating a positive moral capital (Godfrey, 2005). This positive moral capital will then act as an insurance-like protection for the firm's intangible assets and mitigate negative valuations (Godfrey, 2005: 783)

This theoretical framing was developed by Godfrey (2005), who examined how moral capital provides insurance for a firm's relational capital. The author emphasized that the moral capital creates benefits and mitigates negative events unless the harm was caused consciously or by negligence (2005: 788). For instance, consumers can be more skeptical towards firms for which the motive to engage in philanthropic actions is perceived as 'self-serving' or the products are perceived as harmful to society.An example of the latter is Altria Group which owns the brand Marlboro[2]. Altria Group possesses one of the most elevated corporate philanthropic investments. In the past decade it donated over 1 billion dollars in cash, focusing mainly on health and disaster recovery issues. In the year 2004, Altria Group occupied third place in Business Week's ranking of the top corporate philanthropist firms. However, in the case of Altria Group, even with such large amounts of donations, it is difficult to build a positive firm image given their profile of producing a

[2] http://www.businessweek.com/magazine/content/05_48/b3961607.htm

harmful product.

As we mentioned it before, unless the harm is perceived as being purposely caused or caused by negligence, corporate philanthropy will strengthen a well-defined corporate image. Consumers will associate good organizational values with firm products and in turn philanthropy aligned with the business actions of the firms can support a successful advertising.

Up to our knowledge the observation of an existing relationship between corporate philanthropic actions and 'failed' trademarks as a proxy for unsuccessful advertising efforts of the firms has not been addressed before.

1.2.2 Failed advertising efforts

However, researchers previously analyzed the intangible benefits of corporate philanthropy in different contexts, for instance, influence in consumers purchase decisions (Lee et al., 2009) or shaping a positive public evaluation (Fombrun and Shanley, 1990), our study is novel in approaching this relationship by looking at 'failure' in advertising efforts measured by 'failed' (abandoned) trademarks of the firms.

Prior literature that found a positive association between corporate philanthropy and intangible benefits on the firm level argue that those firms which are more involved in charitable giving will earn higher public evaluation *(Fombrun and Shanley, 1990).* This finding also strenghtens our previously mentioned theoretical view about how philanthropic actions can create a moral capital for the firms by influencing for instance consumer perceptions or shaping a positive firm image which in turn will have an influence on consumption. A study by Lee et al. (2009) also argued that corporate philanthropy is positively related to the attitude of consumers and their purchase decisions about firm products produced by firms investing in philanthropic actions.

When introducing a new product to the market firms have to take into account many factors. Statistical demonstrations show that even though firms invest large amounts of resources in developing a new product, one can observe a higher rate of new product failure than new product success (Patrick, 1997). If failure occurs it can negatively affect firms' financial performance, cause bad publicity or increase costs (Davidson and Worrell, 1992). Product failure can be due to several reasons given the complexity of the development process at the organizational level. A successful product introduction depends on aspects like meeting customer needs, technological preparedness and cooperation between intra-organizational units (Dougherty, 1992) or the overall image of the firm. Therefore firms need to align their product development processes with the overall firm strategy (Cooper and Kleinschmidt, 1995). Corporate philanthropy can serve as a 'support mechanism' in representing firm values and help the firm to succed. We measure failure in the advertising efforts of the firms with failed trademarks which is a proxy for advertising 'outcome' and is often related to new products. Trademarks have emblematic and symbolic meanings and consumers mostly associate firm products as well as the firm itself through given trademarks.

1.3 Hypotheses

As mentioned before, customers often evaluate firms from their actions and make associations (Brown and Dacin, 1997) relying on public information. When consumers make purchase decisions they expect firms to behave ethically and truthfully within their business environment and the society in general (Creyer and Ross, 1997). For this reason, firms aim to signal a positive image towards consumers by investing in philanthropic actions (Godfrey, 2005; Peloza, 2005). Contributing to charities is one way for firms to represent socially responsible behavior. The basis for any such relationship between consumer and firm involves trust. As Xia et al. (2004) argue, when consumers have no previous purchase experience with the seller firm, they will base their trust on the firm's image - which can be deducted from public information of the firm's goodwill -. A positive image of the firm will be a signal for initial trust which later, after repeated purchase converts to trustworthiness based on knowledge and interpersonal relationships (2004: 5). Therefore, firms when investing in charitable giving should assure to align these actions with their business initiatives in order to create positive moral capital for the firm and support intangible assets, such as stakeholder relationships and enhanced advertising.

Through this argument we claim that a firm with strong philanthropic presence emphasizing charitable giving will signal positive and socially responsible behavior to stakeholder groups, including consumers. When making purchase decisions consumers consider all the available information about the firm and will prefer to purchase a product from a responsible firm. Therefore, we hypothesize that increasing investment in charitable giving of the firm result in less failure in the advertising efforts which is often related to new product introduction.

Hypothesis 1: *A firm's contribution to charitable giving will lower the failure of advertising efforts.*

Previously, researchers argued that firms should apply different marketing practices depending whether they are oriented towards the individual consumer or the industry market (Webster, 1978). As Coviello and Brodie (2001) argued, firms producing for the consumer market engage more in transaction marketing, using tools of advertising, sales promotion, and public relations. Such marketing communications focusing on branding and visual brand identity enhance consumer loyalty. In an influential paper, Lev et al. (2010) also argue that corporate philanthropy and the visibility of the firm's goodwill is better observed for those firms which sell their products to the individual consumers rather than for those firms which sell their products to the industry market.

As a result, we hypothesize that firms which focus on individual consumers and engage in philanthropic actions, namely charitable giving, will achieve better performance in their advertising efforts often related to new products, than other firms. We argue that individual consumers have a better visibility about firm philanthropic than the industry market.

Hypothesis 2: *The effect of charitable giving on failure in advertising efforts is moderated by individual consumer sensitivity.*

1.4 Data and Methodology

1.4.1 Data description

We select our firm sample from the Standard and Poor's (S&P) 500 list of the largest U.S. firms for the year 2006. Our empirical analysis covers a nine year period, form 2000 to 2008. We identify 167 firms which stay consistent in our dataset throughout the nine years period and did not undergo bankruptcy, merger, or acquisition, and were concurrent with the KLD[3] database S&P 500 identification. Thus, in our final sample we included the selected 167 firms with 1503 firm year observations. We chose the S&P 500 firm list for our study to capture the visibility of the largest charitable donations and to have at our disposal the majority of the trademarks filed in the United States. Our dataset is a balanced panel dataset, where each firm is observed the same number of times.

1.4.2 Variables

Our dependent variable, "Failure", is represented by a novel measure of failed trademarks. Trademark failure occurs due to abandonment, improper licensing and genericity as determined by the law.[4] We consider in our recent study trademark failure due to abandonment, which is defined as the discontinuous use of the trademark with no intent to resume its use, as well as the non-use of the trademark for three consecutive years.[5] The discontinuous use of a trademark is decided on the circumstances, and abandonment is legally exercised with the aim of preventing the occupation of potentially useful marks. We obtained our measure from the USPTO[6] database containing 68,184 trademark failures. The Lanham Act defines trademarks as "*Any word, name, symbol, or device, or any combination thereof used by a person to distinguish his or her goods or services from those sold by others.*"[7]

Nowadays we find a growing number of studies employing trademarks as a measure

[3]KLD: Kinder, Lydenberg, Domini Research and Analytics Inc.
[4]Lanham Act, 15 U.S.C. 1064; 15 U.S.C. 1058.
[5]http://cyber.law.harvard.edu/metaschool/fisher/domain/tm.htm
[6]USPTO: United States Patent and Trademark Office.
[7]Lanham Act, 15 U.S.C.,1127.

of innovation or advertising effort of the firms, using mainly the registration and filing date of new trademarks as an indicators (Daizadeh, 2009; Flikkema et al., 2010; Fosfuri and Giarratana, 2009; Krasnikov et al., 2009; Malmberg, 2005; Mendonca et al., 2004; Millot, 2009; Von Graevenitz, 2009).

Our explanatory variable is “Charitable giving”. Charitable giving represents the visibility of the firm’s goodwill. We have collected data on charitable giving from the KLD Research and Analytics Inc. The KLD STATS[8] database covers among other official firm lists, the S&P 500 list of firms. This dataset separates positive and negative issues for each company yearly from 1991 with a binary (1/0) yes/no value. KLD rates the social, environmental, and governance performance of the companies using positive and negative indicators (strengths and concerns). Companies are rated in seven major qualitative issue areas: environment, community, corporate governance, diversity, employee relations, human rights and product quality and safety.[9] Data on the strengths of the community issue area includes the categories: charitable, non-US charitable and innovative giving, support for education and housing, volunteer programs, and other strengths. From these community strength variables we specifically selected the charitable giving[10] variable as our measure for philanthropic activity, represented by a binary 0/1 variable. Taking the value 1 if firm has consistently given over 1.5% of trailing three-year net earnings before taxes (NEBT) to charity, or has otherwise been notably generous in its giving, and 0 otherwise.

[8]KLD STATS: Statistical Tool for the Analysis of Trends in Social and Environmental Performance.

[9]Information obtained from the official KLD website, see References.

[10]KLD Stats data description of Charitable Giving: The company has consistently given over 1.5% of trailing three-year net earnings before taxes (NEBT) to charity, or has otherwise been notably generous in its giving.

Control variables

We selected firm specific control variables from the Compustat database. We use the variable return on equity ("ROE") - the net income after tax divided by the shareholder equity - to control for firm performance and firm reputation. As Fombrun and Shanley (1990) mentioned in their work, corporate reputation is represented partially by the financial performance of the firm arising mainly from accounting data. The variable R&D expenditure ("R&D expenditure") represents all costs incurred during the year that relate to the development of new advertising often related to new products or services. This variable is important to control for the different levels of R&D investments among the firms. The variable sales ("Sales") represent the net sales of the firm, controlling for the size of the firm. Advertising expenses ("Advertising expense") stands for the cost of advertising media (i.e., radio, television, and periodicals) and additional promotional costs of the firm. For all the above mentioned variables we take the natural logarithm. To distinguish between high and low individual consumer sensitive firms we introduce a dummy variable which we multiply by our independent variable ("Charitable giving*High sensitivity"). It takes the value 1 if the firm engaged in charitable donation (classified by it's SIC code as consumer oriented) and 0 otherwise. In addition, we included as a control variable the total number of trademarks ("Trademark Total # ") as obtained from the USPTO database. Finally, we created two set of dummy variables: time dummy variables ("Time dummy") for each year from 2000 to 2008; and a high sensitivity dummy variable (High sens.dummy), which takes value 1 if the firm is classified by its SIC code as consumer oriented and 0 otherwise.

1.4.3 Model selection

Our general model is

$$Y \approx f(X, \beta)$$

Where Y represents our count dependent variable (Failure), X our explanatory variable (Charitable giving) and β is a vector of parameters. We use the negative binomial regression model for our data analysis. We chose this model to capture the over dispersion in our sample, having greater variance than the mean. Notice that the Poisson model would be inappropriate holding the criterion of mean and variance equality (Greene, 2003). The likelihood ratio test of our negative binomial model also confirms our model choice. In addition, we applied the Hausman test on our data to decide whether to use random or fixed-effects specification in our model. The results of the test led to the rejection of the null hypothesis of uncorrelation between regressors and therefore we reject using random effects in our analysis (p-value less than 0.01%). We thus applied the fixed-effects negative binomial regression model to test our two hypotheses. We conducted our empirical analysis with the STATA 10 statistical software.

1.5 Results

In Tables 1 and 2 we represent the descriptive statistics of our variables and the corresponding correlation matrix. Table 1 contains the number of observations, mean, standard deviation, and maximum and minimum values for our key variables. Observe that an average firm in our sample owns 32 trademarks. Furthermore, those failures for an average firm, which we represent by failed trademarks, involve nearly 15 trademarks.

Table 1: Descriptive Statistics

Variable	Observation	Mean	S.D.	Min	Max
Failure	1503	14.74	45.35	0	674
Charitable giving	1503	0.07	0.26	0	1
Charitable giving*High sensitivity dummy	1503	0.04	0.21	0	1
High sensitivity dummy	1503	0.43	0.49	0	1
R&D expenditure	1503	4.82	1.88	0	7.09
Advertising expenses	1503	2.35	2.65	0	6.94
Total trademark #	1503	31.82	77.72	0	1157
Sales	1503	15.98	1.29	11.94	19.86
ROE	1503	18.38	33.93	-179.37	473.08

Table 2: Correlation Matrix

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.
1.Failure	1								
2.Charitable giv.	0.1377	1							
3.Char. giv.*High sens. d.	0.2063	0.7292	1						
4.High sens. dummy	0.2011	0.0704	0.2422	1					
5.R&D exp.	0.1061	-0.0891	-0.1753	-0.4019	1				
6.Adv. exp.	0.2100	0.0781	0.1994	0.3127	-0.2523	1			
7.Total trademark #	0.9324	0.1446	0.2142	0.2050	0.0946	-0.1773	1		
8.Sales	0.1016	0.1582	0.1564	0.1435	-0.0371	0.1816	0.1438	1	
9.ROE	0.0486	-0.0356	-0.0273	0.1291	-0.0393	0.1328	0.0510	0.0830	1

In Table 3 we show the results of Hypotheses 1 and 2. Hypothesis 1 analyzes the relationship between charitable giving and failure in advertising efforts of the firms. We applied a fixed effects negative binomial regression model to test this hypothesis. Our results are statistically significant showing a strong negative relationship between our dependent and explanatory variable thus, confirming Hypothesis 1. Roughly speaking, the more a firm invests in charitable giving the less failure it will suffer as consumers will perceive the firm as truthful and fair. In our model we included our control variable Advertising expense which shows a negative sign but is statistically insignificant. An interesting observation is our second control variable, R&D expenditure, which is statistically significant and positive in sign.

Hypothesis 2 focuses on the individual/industrial consumer categories. To identify these two categories we followed the industry classification of the SIC Manual (1972), which is usually considered by researchers for such categorization. For instance, Ehrlich and Fisher (1982) have applied this classification in order to distinguish between consumer/producer oriented manufacturing industries.

To test our second hypothesis, we newly conducted a fixed effects negative binomial regression, observing the influence of charitable giving on product failure taking into account the target consumers of the firm, depending whether it is an individual consumer or a business-to-business relationship. We measure high individual consumer sensitivity with a dummy variable taking the value 1 if the firm is individual consumer oriented and is specified according to the SIC classification as a consumer oriented firm; whereas it takes the value 0 if the firm is classified as industrial consumer oriented. We multiply our dummy variable for high individual consumer sensitivity (High sensitivity) by our independent variable Charitable giving to test Hypothesis 2. We conducted a T-test on the Beta coefficients of the two groups of high and low consumer sensitive firms, where we obtained confirmation about the distinction between these groups (Prob > chi2 = 0.0393).

Table 3: Estimation results of the impact of charitable giving of the firms on product failure

[Failure]	(1)	(2)	(3)	(4)
Charitable Giving	-0.28^{*}	-0.61^{**}	-0.45^{***}	-0.47^{**}
	(0.11)	(0.19)	(0.09)	(0.17)
Charitable Giving* High Sens. Dummy		0.54^{*}		0.08
		(0.23)		(0.20)
High Sensitivity Dummy		0.39^{***}		0.70^{***}
		(0.11)		(0.14)
R&D Expenditure			0.10^{**}	0.16^{***}
			(0.03)	(0.03)
Advertising Expense			-0.01	-0.04
			(0.02)	(0.02)
Total Trademark #			0.004^{***}	0.004^{***}
			(0.00)	(0.00)
Sales			0.10^{*}	0.10^{*}
			(0.04)	(0.04)
ROE			0.28^{***}	0.26^{***}
			(0.07)	(0.07)
Time Dummies			Yes	Yes
Constant	0.16^{**}	-0.02	-1.02	-1.62^{*}
	(0.06)	(0.08)	(0.70)	(0.71)
Observations			1503	1503
Number of Firms			167	167
Chi^2	6.19	26.23	964.89	1064.46
Log Likelihood	-3415.81	-3404.48	-3186.75	-3173.36

Note: Standard errors in pharenthesis. Significance levels *** p<0.01, ** p<0.05, * p<0.1

The results do not support our second hypothesis, showing no significance for a stronger relationship of high individual consumer sensitive firms associated with stronger visibility of firm identity through charitable contribution and the failure of advertising efforts of the firms. Previous literature (Avlonitis and Gounaris, 1997; Kotler and Armstrong, 2004) emphasized a more refined and developed marketing orientation for individual consumer oriented firms, whereas identified a strongly sales oriented relationship among industrial consumers and their seller firms. The researchers referred to high individual consumer sensitive firms as being more sensitive to the implementation of changes in consumer needs and market conditions infirm products and strategic actions (Avlonitis and Gounaris, 1997). However in our current study we did not find support for these previous observations.

1.6 Conclusion

To achieve social recognition and enhance a positive corporate image, firms increasingly focus on different stakeholder groups and tend to create a closer relationship with them. Investing in corporate philanthropy, which is considered to be an important part of corporate social responsibility (Carroll, 1997), may increase a positive public evaluation and the trustworthiness of firms among its stakeholders. The theoretical work by Godfrey (2005) highlights moral capital building as a mechanism for obtaining positive public evaluation through corporate philanthropic actions. Godfrey argues that moral capital building creates protection for the firm's intangible assets such as stakeholder relations and accordingly increases shareholder wealth.

In our empirical study we focus on one particular stakeholder group, the consumers. We aim to prove that firms investing in corporate philanthropic action, namely, charitable giving, positively affects the consumers' perception about the firm and thereby prevents failures in advertising efforts often related to new product intrdocution. First, we hypothesize that firms suffer less failure in their advertising efforts which are often related to new product introduction and measured by abandoned trademarks, if they invest in charitable giving. Second, we hypothesize that this relationship will be more visible for firms focusing on individual consumers.

Our novel measure of failure in advertising efforts is obtained from trademark data from the USPTO database. Our results confirm our first hypothesis, where we found that firms that engage in charitable giving suffer less failure in their advertising efforts. However, our results do not support our second hypothesis, implying a more significant effect for high individual consumer sensitive firms.

This study states a general conclusion of consumer response to firm actions, where a positive action will be rewarded generating reciprocal stakeholder-firm benefits. In our future research we intend to focus on the economic benefits of charitable giving and on finding further evidence of the tangible benefits of corporate philanthropy.

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Chapter 2

Institutional Pressures and Firm's CSR Actions: A Geographical Approach

Abstract

We study the relationship between internal and external stakeholder pressures and firm CSR actions. We distinguish two types of CSR actions, altruistic and innovative CSR actions. We argue that firms respond to stakeholder pressures taking into account specific characteristics, such as the visibility, the cost sturcture and the time constraints of the two CSR action types. We find that internal and local external stakeholder pressures - employees or local NGOs - affect positively innovative CSR actions. We also find a positvie relationship between external stakeholder pressures - local NGOs and global human right concerns - and altruistic CSR actions.

Keywords: institutional, pressure, CSR, geographic distance, visibility, stakeholder.

2.1 Introduction

Previous research on corporate social responsibility (CSR) is extensive (Carroll et al., 1987, Burke and Logsdon, 1996; Waddock and Graves 1997; Hillman and Keim 2001; Orlitzky et al., 2003; Margolis and Walsh, 2003; Garriga and Melé 2004; Porter and Kramer, 2002; Donaldson and Dunfee 1994). Scholars often analyze the motivations (Garriga and Melé 2004; Orlitzky et al., 2003) and the consequences (Lev et al., 2010; Waddock and Graves, 1997) of CSR actions. It is well known from previous research that firm motivations to initiate CSR actions can originate from the increased societal requirements of institutional actors and stakeholder groups (Porter and Kramer, 2006; Marquis et al., 2007). Such increased attention from the society often puts firms in the center of attention. Firms, in order to respond to these claims, invest in corporate social responsibility because CSR actions provide legitimacy to the firm and allow them to continue their existence.

The novelty in our study is that we introduce a geographical dimension to the notion of institutional pressures. We argue that geographical distance of institutional pressures matters for firms in choosing their CSR action strategies. To study this setting is relevant first because the stakeholder groups of the firms and therefore institutional pressures are highly diverse (Freeman, 1984; Donaldson and Preston, 1995) and second because there are fundamental differences in the basic characteristics – visibility, cost structure and time constraints - of CSR actions which the firm has to take into account in order to respond to institutional pressures correctly (Burke and Logsdon, 1996; Paul and Siegel, 2006). Stakeholder groups are any group of individuals that have a claim on or a stake in a firm (Freeman, 1984) and are affected by the firms' actions. Stakeholder groups can assert institutional pressure on firms when they perceive firm actions as unethical or irresponsible. These stakeholder groups are geographically distant from each other and have distinct concerns about the firm. Therefore we distinguish internal and external stakeholder groups of the firm (Zucker, 1987). We make this categorization in order to capture the different nature of institutional pressures which affects firm CSR actions. On one hand we measure internal institutional pressure by taking into account the stakeholder pressure coming from employees. On the other hand we make two subcategories of external institutional pressures, namely, local and global stakeholder pressures that affect firm CSR actions. With local institutional pressures we measure stakeholder pressures coming from local NGOs and with human rights concerns we analyze global stakeholder pressures.

We connect internal and external institutional pressures to CSR actions. We argue that in our setting firms motivation to invest in CSR actions is originated from an internal or external institutional pressure (Scott, 1987; Powell and DiMaggio, 1991) so that firms develop a CSR strategy in order to respond to them. The complexity of CSR actions is well known from the previous CSR literature (Carroll et al., 1987; Waddock and Graves 1997), for instance Burke and Logsdon (1996) studied previously the complexity of CSR actions and identified five dimensions, which are: centrality, specificity, proactivity, voluntarism and visibility of the actions. We argue that when firms are facing institutional pressure, they have to take into account specific characteristics of CSR actions to respond adequately. We believe that the visibility, the cost structure and the time constraints of CSR actions will be key characteristics that the firms have to evaluate when responding to institutional pressures. We separate two types of CSR actions, altruistic and innovative CSR actions.

We separate these two types as they have clearly distinguishable values for the firm and for the stakeholder groups regarding their previously mentioned characteristics - we further discuss these arguments in the following sections of the paper -.

This is important to study because firms will have a better understanding about the different stakeholder pressures they may face and will be able to set them in a geographical perspective when making investment decisions about CSR actions in order to respond to them. With this framework firms will be able to align their CSR actions with their business actions to gain legitimacy and improve their competitive advantage.

As we mentioned before, to connect internal and external stakeholder pressures and CSR actions we build on institutional theory (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; North, 1990; Friedland and Alford, 1991). We hypothesize that firms use altruistic CSR actions as a response to institutional pressures when the pressure is coming from external - local and global – stakeholder groups. We also hypothesize that firms use innovative CSR actions as a response to institutional pressures when it comes either from internal or from local external stakeholder groups. To test these relationships we use a sample of 151 firms from the S&P 500 firms list and apply the seemingly unrelated regression equations model by Zellner (1962). Our results confirm that geographical distance of institutional pressures matter and will influence CSR actions of the firms by reacting to internal and external pressures with either altruistic or innovative CSR actions depending on the characteristics of each.

The remaining of this paper is as follows. In Sections 2 we review the theoretical literature. In Section 3 we present and discuss our hypotheses. In Section 4 and 5 we explain our methodology and the results of the empirical analysis and lastly (Section 6) we conclude.

2.2 Theoretical background

2.2.1 Institutional theory

In our study we build on institutional theory (DiMaggio and Powell, 1983; Friedland and Alford, 1991; Meyer and Rowan, 1977; 1983; North, 1990) to study the relationship between stakeholder pressures and their effects on CSR actions. DiMaggio and Powell (1983) define the new institutionalism and the process of institutional isomorphism. In this process when a new sector emerges, the organizations and the environment mutually shape each other and create an established legal framework. With time, when new organizations enter in the same sector, they adapt to their environment and to the existing legal requisites.

DiMaggio and Powell (1983) describe the mechanisms of institutional isomorphic processes namely, coercive, mimetic, and normative processes. Firms in order to gain legitimacy in their institutional environment apply these isomorphic processes arising either from a higher authority (coercive), uncertainty (mimetic) or from the professional environment (normative). Stakeholders, as institutional actors, can play an important role in forming the insitutional environment of businesses (e.g. social movements). Because stakeholder groups are diverse, their interests and focus of pressure can affect firms in different ways and degrees to which firms react by choosing their best response (altruistic or innovative CSR).

Delmas and Toffel (2008), for instance, show that firms respond to institutional pressures coming from market and non-market constituencies differently. In a more recent paper by the same authors, Delmas and Toffel (2011) argue that firms, although facing common institutional pressures, adopt different environmental practices due to organizational characteristics. Also, Chiu and Sharfman (2011) analyze that institutional pressures are more likely to have higher levels for those firms that are more visible toward institutional actors. These findings reinforce our view about the existing differences in stakeholder pressures and the corresponding firm responses. In our current study we analyze how stakeholder pressures can differ by taking into account the geography of the pressures. We separate internal -, local external-, and global external stakeholder pressures. In this sense, firms facing stakeholder pressures coming from these distinct geographical distances will respond by investing either in altruistic or in innovative CSR actions, depending on the type of pressure and firm characteristics. By these actions firms will gain legitimacy that provides them with a 'licence' for a long-term existence. Moreover, firms will be able to align better the needs of different stakeholder groups with the firms objectives.

In the following subsection we explain more in detail the geographical aspect of institutional pressures.

2.2.2 Geographical approach of instituional pressure

Prior literature on stakeholder management analyzed the effects of stakeholder pressures on firm actions (Marquis et al., 2007). As we mentioned before, in our current study we categorize stakeholder pressures regarding their geographical distance to the firm. We identify internal, local external, and global external stakeholder pressures and we analyze how they affect firm CSR actions.

Stakeholder groups were defined by Freeman (1984) as any group of individuals that are influenced by or are influencing the operations of the firms. Freeman (1984) also refered to an internal and external orientation of stakeholder groups with regard to the position of the firms (Freeman, 1984). We measure internal stakeholder groups by employee concerns; and external stakeholder pressures by local and global pressures, coming accordingly from local NGOs and global human rights concerns.

Internal stakeholder pressures differ from external stakeholder pressures in their capabilities to influence firm actions. Internal stakeholder groups are important because of their commitment to the firm and their ability to communicate a shared understanding about an optimal alignment of CSR and business actions inside the firm (Porter and Kramer, 2006). A study by Sarkis et al. (2010) analyzed internal and external stakeholder pressures highlighting internal stakeholder concerns as a key factor to the adoption of sustainable firm practices in the firm. We argue that internal stakeholders, namely, employees will favor CSR actions that are related to the long-term advantage of the firms and that gives a good strategic positioning among the firms' competitors.

External stakeholder groups have an influence on the public audience and can shape a public opinion about the firm. Marquis et al. (2007) studied how local external pressures can affect firm CSR actions. The authors highlight isomorphic pressures in local communities that form CSR actions. They mention cultural cognitive, regulative and relational forces that primarily influence firm CSR actions.We argue that because of their external influence, local NGO's and global human rights concerns, are important external stakeholder pressures and given their geographical distance, they have to be responded by the firms differently than compared to internal stakeholder pressures.

We study this phenomenon of external and internal stakeholder pressures and CSR actions because we expect great variation between the two given that stakeholder groups differ in their claims towards the firms. We argue that the geography of stakeholder pressures are an important factor when making firm decisions about CSR actions (altruistic and innovative) because firms will take into account these characteristics and evaluate CSR actions by their visbility, cost structure and time constraints, in order to respond adequately. We will explain this framework more in detail in the following subsection.

2.2.3 CSR and institutional theory

As we discussed it previously institutional theory is often applied in CSR research (Campbell, 2007; Desai, 2011; Matten and Moon, 2008). Previous studies use institutional theory in different settings related to corporate social responsibility. We find studies that analyze CSR practices and focus on institutional conditions (Campbell, 2007; Matten and Moon, 2008); other researchers study international institutional practices in relation with CSR (Husted and Allen, 2006; Golob and Bartlett, 2007; Doh and Guay, 2006; Yin and Zhang, 2012); or focus on a particular type of institutional processes (coercive, mimetic, or normative) to find a common pattern in firm CSR actions (Berrone et al., 2009; Marquis et al., 2007). Currently, various typologies exist of CSR actions in the corporate social responsibility literature (Husted & de Jesus Salazar, 2006; Windsor, 2006). For instance, Husted and de Jesus Salazar (2006) analyze CSR types of altruism, coerced egoism and strategy. Porter and Kramer (2006) distinguish general social issues, responsive CSR and strategic CSR that influence firms' performance in a competitive environment. Lantos

(2001) also provides a framework of ethical, altruistic and strategic CSR actions of the firms. Whereas Halme and Laurila (2009) typify CSR actions in an action-based typology and separate: philanthropic, integrative and innovative.

As we mentioned it earlier in our study we differentiate between two types of CSR actions: altruistic and innovative CSR actions. We describe altruistic CSR actions as philanthropic actions of the firms, which have no financial benefits for the firm and usually take the form of cash or non-cash firm donations, for example charitable giving. On the other hand we describe innovative CSR actions as any non-purely altruistic CSR actions of the firms. We include policy adoptions, R&D investments in responsible innovation and new responsible product and project developments of the firm.

We explain our typology taking into account three characteristics of the actions to the conformity to institutional pressures – the visibility, the cost structure and the time constraints. The visibility of the CSR actions towards the internal and external stakeholder groups is an important characteristic of value creation for the firms (Burke and Logsdon, 1996; Chiu and Sharfman, 2011). We use the definition of CSR visibility by Burke and Logsdon (1996), which states that: "Visibility denotes both the observability of a business activity and the firm's ability to gain recognition from internal and external stakeholders (1996: 499)." It is important to differentiate between the visibility of altruistic and innovative CSR actions of the firms on internal and external levels. Altruistic actions are generally more visible for external stakeholder groups whereas innovative actions are more visible for internal and local external stakeholder groups. The investment/cost structure is also important when we differentiate between the two types of CSR actions. If we compare altruistic and innovative CSR actions we can see clearly the differences in their cost structures. Altruistic CSR actions are charitable giving actions in form of cash and product donations, a once or periodically applied (e.g. yearly) cost for the firm of a certain amount, whereas innovative CSR actions are long term policy adoptions or R&D investments in new responsible product and project developments which involves more uncertainty about the amount invested and for a continuous period of time. We argue that altruistic CSR actions therefore will represent a lower cost than compared to innovative CSR actions of the firm. Firms choose actions when facing institutional pressure that guarantee them the highest conformity at lower cost. The time constraints of the CSR actions is also an important characteristic when facing institutional pressure as firms may need to take into account a certain time frame. When the response to the pressure is urgent firms have to choose a CSR action that has the appropriate characteristic. Altruistic actions – e.g. charitable giving, cash or product donations - have the ability to serve as an adequate response when the firms are facing urgent institutional pressures, whereas innovative CSR actions - e. g. new responsible product or process developments - are more suitable for a long term in-depth response.

Table 1. CSR action framework

	Altruistic CSR	**Innovative CSR**
Visbility (to public audience)	High	Low
Cost structure	One-time; Periodical	Continuous
Time constraints	Rapid	Moderate

2.3 Hypotheses

Our first hypothesis states that when institutional pressures comes from internal stakeholder group of the firm, namely, employees, then innovative CSR actions will be emphasized over altruistic CSR actions. We base our arguments on our previously discussed relationship between stakeholder pressures and CSR actions (Marquis et al., 2007). We argue that the relationship of internal institutional pressures and altruistic and innovative CSR actions lie on three characteristics: the visibility, the cost structure and the time constraints of the CSR actions. The visibility of CSR actions towards internal stakeholder groups of the firm is more emphasized by innovative CSR actions because employees have insider information and understand better the underlying mechanisms of connecting CSR and business actions. If we look at the cost structure of CSR actions we can say that innovative CSR actions require more resources than compared to altruistic CSR actions as usually they refer to new responsible product or process developments. For this reason innovative CSR actions will be valued more by internal stakeholder groups as these actions will be beneficial not only for the society but also for the firm. Also, as the firm involves employees in innovative CSR projects it will enhance employee satisfaction of being part of a responsible firm. As mentioned previously, time constraints are also an important characteristics when firms are responding to institutional pressures. Innovative actions, as we have argued, usually take longer time to develop as altruistic actions. In the case of internal institutional pressure, employees will value the efforts that the firm takes to enhance innovative CSR actions and will also value the outcome of these actions as they are more patient, less sensitive to time constraints. Therefore with these arguments we state that the employees of the firm will favor innovative CSR actions over altruistic CSR actions. We hypothesize the following:

Hypothesis 1: Firms facing institutional pressure coming from internal stakeholder group, namely, from employees will emphasize more innovative CSR actions then altruistic CSR actions.

In our second hypotheses we analyze how external local stakeholder pressures coming from local nongovernmental organizations (NGOs) affect firm CSR actions. We measure local NGOs by the number of NGOs in the same state where the firms' headquarters are located divided by the population of all NGOs in our sample. We base our arguments on our previous discussion of institutional theory (DiMaggio and Powell, 1983) and stakeholder pressure coming from the stakeholder groups (Freeman, 1984) of the firms. When facing pressures from local NGOs firms have to take into account both types of CSR actions to respond adequately, because we argue that local NGOs can pressure firms and require a quick response, an urgent answer to its concerns, but the pressure can also be persistent as being geographically close and can require long term collaboration. In this case firms have to consider both, altruisitc and innovative CSR actions at the same time to respond to local NGO pressures. Altruistic CSR actions are more visible towards external groups and provide a quick answer, however innovative CSR actions are less visible and take a longer time to respond. Given the fact that local NGOs can assert pressure on the firm either temporary or persistent because of their grographical proximity firms respond can respond with a short or a long-term solution. Therefore, in this case, firms will equally care about the altruistic and innovative CSR actions. We hypothesize the following:

Hypothesis 2: Firms facing institutional pressure coming from local external stakeholder groups, namely, from local NGOs will emphasize both altruistic CSR actions and innovative CSR actions.

In our third hypotheses we focus on the relationship between global external institutional pressures and the CSR actions of the firms. Global external institutional pressures are measured by human rights concerns. We argue that altruistic CSR actions will be more emphasized by firms when facing external global institutional pressures. We base our argument on the characteristics of altruistic and innovative CSR actions. The visibility of altruistic CSR actions in this case will be even more important than previously because of the articulated geographical distance between the pressure and the firms main location. Firms will shift from investing in innovative CSR actions to investing in altruistic CSR actions in order to handle the concerns coming from a geographically distant location. Firms respond with altruistic CSR actions to these distant pressures because it is more time efficient, requires less resources and is highly visible for the public. Global stakeholder pressures compared to internal or local pressures are less likely to be persistent. For this reason we state that firms will favor altruistic actions to innovative CSR actions when receiving global stakeholder pressures. We hypothesize the following:

Hypothesis 3: Firms facing institutional pressure coming from external global stakeholder groups, namely, from human rights concerns will emphasize more altruistic CSR actions and decrease innovative CSR actions.

2.4 Data and Methodology

2.4.1 Model description

In this section we describe our dataset and the methodology for our empirical analysis. Our dataset is a balanced panel dataset covering a nine year period, from 2000 to 2008. We have 151 firms in our dataset with 1208 firm year observations from the Standard and Poor's 500 (S&P 500) list of the five hundred best performing firms in the United States. We use the S&P 500 list of firms in order to capture the importance of institutional pressure and CSR actions accurately as the majority of these concerns and the related CSR actions are present in large companies. Our final sample contains 151 firms because during our nine year period many firms from the 500 list went through merger and acquisition or faced bankruptcy. Moreover, our main concern was the missing data for a large set of the companies because of using three different databases over a nine year period (KLD STATS database, COMPUTAT and WANGO). For these reasons we created our final sample of 151 firms from the originally S&P 500 firms sample. Our sample has some potential biases given that we use only large and public firms which might affect the generalizability of our results.

To analyze the relationship between institutional pressures and CSR actions we use the seemingly unrelated regressions (SUR) equations model to test our hypotheses:

$$Yi = Xi\beta i + \varepsilon i \qquad i = 1, \ldots, M$$

The SUR model was intruded by Zellner (1962) and used widely in the fields of finance and economics. This model is useful for our analysis beause it states that if a system of equations are related by their error-terms which means that the variance-covariance matrix used is non-diagonal or the off-diagonal terms are not zero. Also the model will be efficient if the independent variables are not the same through the different equations in the system.

We use the Breusch- Pagan test to see whether the error terms of the equations are related or not. The test confirms (P=0.000) that the two equations are related in their error-terms; therefore, it is correct to use the SUR model.

2.4.2 Variable description

Dependent variables

Our two dependent variables are “Altruistic CSR” actions and “Innovative CSR” actions. We construct both of our variables from the KLD Stats database. In the KLD database there are seven major issue areas and 80 indicators, all indicators are binary 0/1 constructs. All seven issue areas are divided in two parts, strengths and concerns.

“Altruistic CSR” actions as we previously defined, refers to charitable giving of the firms; using firm resources for altruistic purposes, usually cash or non-cash donations. We construct our variable by using the strengths indicators from the ‘Community’ issue area of the KLD database. We use all the strengths indicators in the Community issue area, which are: generous giving, innovative giving, support for education, support for housing, volunteer programs and other community strengths. We add these six originally binary indicators to create our measure.

“Innovative CSR” actions as also defined previously, refer to responsible product or process developments and policy adoptions of the firms. We construct this variable by using strength indicators from the ‘Product’ and ‘Environmental’ issue areas of the KLD database. We use the following selected strengths indicators: environmental products and services, R&D/ Innovation in responsible product developments, benefits to economically disadvantaged through products and other product strengths. We add these four originally binary indicators to create our measure.

Independent variables

Our independent variables are “Employee pressure”, “NGO pressure” and “Human rights concerns”. We build the variables, “Employee pressure” and “Human rights concerns”, from the KLD Stats database. As we mentioned it before the KLD database has seven major issue areas and 80 binary indicators divided into two parts, strengths and concerns. To build our independent variables “Employee pressure” and “Human rights concerns”. we use in each case the concerns indicators from the corresponding issue areas. To build our “NGO pressure” we used our own dataset created from the WANGO database http://www.wango.org/ of worldwide NGOs.

“Employee pressure” is our variable to measure internal institutional pressure. We constructed this variable from the ‘Employee relations’ issue area and using the concerns indicators: union relations, health and safety concerns, workforce reduction, retirement benefit concerns and other employee concern variables. We again add these five binary indicators to obtain our variable.

"NGO pressure" is our variable to measure local external institutional pressures. We constructed this variable by the number of NGOs in the same state where the firms have their headquarters (NGO pressure = # of NGOs in a state/ population of NGOs). We took the data from the world association of non-governmental organizations (WANGO). In our dataset we identified in total 21.503 NGOs. NGOs are defined by The World Bank as: "Private organizations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development." NGOs act independently from any governmental or political party. NGOs often exercise pressure on firms in order to make them behave responsible. An example is the US religious organization, Interfaith Center on Corporate Responsibility (ICCR), which targets firms such as ExxonMobil, Wal-Mart and Chevron with shareholder activism in order to achieve responsible firm behavior. Also NGOs often pressure firms with permanent media attention raising neglected firm responsibility issues. Two famous examples are the cases of Reebok and British Petroleum (Yu, 2008; The Economist article, 2010[1]). Both firms received strong media attention from NGOs because of irresponsible firm behavior in the past years. In our current study we do not distinguish among NGO pressure types as it is not part of our focus in the current paper.

"Human rights concerns" is our variable to measure external global institutional pressures. We constructed this variable from the 'Human rights' issue area and using the concerns indicators: South Africa, Northern Ireland, Burma, Mexico, labor rights, indigenous peoples relations and other concerns . We again add these five binary indicators to obtain our variable. Human rights concerns are important as they can negatively affect

[1] http://www.economist.com/blogs/newsbook/2010/07/bps_future

firm reputation and have a global media coverage which can result very harmful for the firm. We recall the example of Nike Inc., an American apparel company, which had various pressures from different stakeholder groups (e.g. consumers, NGOs, activists) concerned about their so called sweatshop processes in Asian countries where their manufacturing installations are located (Locke, 2002).

We use a one year lag of our independent variables to capture previous institutional pressures (t-1) relationship to CSR actions (t).

Control variables

In addition, we use the following control variables: "State Population"[2], "State Land area"[3], "Sales", "Employees", "ROA", R&D expenses", "Advertising expenses" and "Time dummy" variables. The variables "State Population" and "State Land area" are obtained from the United States Census Bureau[4]. The variables "Sales", "Employees", "R&D expenses", "Advertising expenses" and "ROA" are obtained from the COMPUSTAT database. For the variables "Sales", "Employees", "Advertising expenses" and "R&D expenses" we take the natural logarithm. The variable "Sales" represents the annual sales of the firms in our sample and the variable "Employees" represents the number of employees of the firms in our sample; both control for firm size. The variable "ROA" denotes the annual return-on-assets (net income/total assets) of the firms. The "Advertising expenses" variable stands for the cost of advertising media (i.e., radio, television, and periodicals) and additional promotional costs of the firm. The "R&D expenses" variable represents all

[2] From the year 2010, in million.
[3] From the year 2010, in square miles.
[4] http://www.census.gov, http://quickfacts.census.gov/qfd/index.html

costs incurred during the year that relate to the development of new products or services; this variable is important to control for the different levels of R&D investments among the firms. Also, we use time dummy variables given the panel nature of our dataset - it takes the value 0 or 1 depending on the given year-. We take a one year lag (t-1) of our control variables in our regression analysis.

2.5 Results

In Table 2 we show the descriptive statistics and the correlation matrix of our variables.

Table 2: Descriptive statistics and correlation matrix

Variables	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.Altruistic CSR act.	.608	.912	1									
2.Innovative CSR act.	.214	.436	0.158	1								
3.Employee Pressure	.709	.831	0.098	0.083	1							
4.NGO pressure	.082	.093	0.147	-0.025	-0.106	1						
5.Human rights cons.	.240	.477	0.239	-0.025	0.235	0.009	1					
6.State population	1.61e+07	1.21e+07	0.064	-0.078	-0.079	0.846	0.049	1				
7.State land area	78334.08	72027.28	0.031	-0.083	-0.013	0.441	0.171	0.761	1			
8.ROA	63.15	88.18	0.090	0.028	-0.112	-0.021	0.036	0.002	0.048	1		
9.Sales (log)	6.97	.556	0.389	0.112	0.266	-0.139	0.402	-0.108	0.023	0.119	1	
10.Employees (log)	4.52	.534	0.331	0.122	0.255	-0.271	0.338	-0.276	-0.128	0.090	0.837	1

The results of our regression analysis are shown in Table 3 and Table 4.

Table 3: Estimation results of the impact of institutional pressures on altruistic and innovative CSR actions.

	Altruistic CSR actions	Altruistic CSR actions	Innovative CSR actions	Innovative CSR actions
Employee pressure		0.0157		0.0381**
		(0.0314)		(0.0162)
NGO pressure		4.205***		0.822***
		(0.588)		(0.308)
Human rights concerns		0.231***		-0.0773***
		(0.0550)		(0.0292)
State population	2.00e-08***	-1.89e-08***	4.46e-10	-7.24e-09**
	(3.23e-09)	(6.32e-09)	(1.66e-09)	(3.32e-09)
State land area	-1.57e-06***	6.52e-07	-4.84e-07*	1.11e-07
	(5.24e-07)	(6.36e-07)	(2.69e-07)	(3.33e-07)
ROA	0.000585**	0.000628**		
	(0.000283)	0.000279)		
Employees (log)	0.652***	0.570***	0.0812*	0.0742
	(0.0478)	(0.0505)	(0.0454)	(0.0453)
Sales (log)			0.0146	0.0339
			(0.0427)	(0.0431)
Time dummies	Yes	Yes	Yes	Yes
Constant	-2.551***	-2.183***	-0.226	-0.337*
	(0.239)	(0.242)	(0.174)	(0.183)
R-squared	0.149	0.199	0.022	0.036
N	1208	1208	1208	1208

Note: Standard errors in parentheses. Significance levels *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 4: Estimation results of the impact of institutional pressures on altruistic and innovative CSR action (robust).

	Altruistic CSR actions	Altruistic CSR actions	Innovative CSR actions	Innovative CSR actions
Employee pressure		-0.0347		0.164**
		(0.161)		(0.0817)
Local community pressure		0.741***		0.254*
		(0.281)		(0.153)
Human rights concerns		1.155***		-0.395***
		(0.286)		(0.148)
State population	2.00e-08***	2.01e-08***	4.46e-10	4.33e-10
	(3.23e-09)	(3.19e-09)	(1.66e-09)	(1.65e-09)
State land area	-1.57e-06***	-2.00e-06***	-4.84e-07*	-3.98e-07
	(5.24e-07)	(5.26e-07)	(2.69e-07)	(2.72e-07)
ROA	0.000585**	0.000574**		
	(0.000283)	(0.000281)		
Employees (log)	0.652***	0.544***	0.0812*	0.0858*
	(0.0478)	(0.0521)	(0.0454)	(0.0461)
Sales (log)			0.0146	0.0101
			(0.0427)	(0.0456)
Time dummies	Yes	No	Yes	No
Constant	-2.551***	-2.169***	-0.226	-0.239
	(0.239)	(0.245)	(0.174)	(0.188)
R-squared	0.149	0.169	0.022	0.031
N	1208	1208	1208	1208

Note: Standard errors in parentheses. Significance levels *** $p<0.01$, ** $p<0.05$, * $p<0.1$

The results confirm our hypothesis and show that altruistic CSR actions are more visible and more valued by external stakeholder groups. Therefore we find a positive and significant relationship between altruistic CSR actions and external institutional pressures, both on local and global levels (H2; H3). We also argue that these results confirm the relationship between internal employee pressure and altruistic actions which hypothesized no benefits for employees. Therefore, employees do not consider altruistic actions as a proper answer to internal stakeholder concerns.

Regarding firm innovative CSR actions we also find results confirming our hypotheses. We find that internal employee pressures and external local NGO pressures have a positive and significant relationship to the innovative CSR actions of the firm (H1). We also find confirmation about that global external institutional pressure, which we measure by human rights concerns, is negatively related to the firms' innovative CSR actions (H3).

We interpret these results as the following. We found that internal employee pressures and local external NGO pressures are positively related to the innovative CSR actions of the firm. This positive relationship is explained by the focus of the firm on the well-being and satisfaction of these particular stakeholder groups when investing in innovation. For instance employees can benefit from investments in R&D and in the development of new responsible product or operating systems in the firm, because by adapting to regulations and policies, the firm will pay more attention to employee relations and hereby increase their satisfaction at the workplace. The same applies to the local stakeholder groups. Also, we found that external global institutional pressures – Human rights concerns - are relevant when the firm behaves unethical or harms its environment. If this is the case, the image of the firm will suffer from such negative events and the firm will use a CSR type that is not related to any financial benefit but to a great visibility for external stakeholders of the firm. The firm will engage in purely altruistic actions to recover the good image. The firms will shift from innovative CSR actions and invest in altruistic CSR actions when they face external global pressure - human rights concerns -. Moreover, if firms also have to face short time conditions then firms will also prefer to invest in altruistic actions for a quick response and choose not to invest in more costly and long term development of a new responsible business or product.

In Table 4 we show our results of the robustness check of our previous regression analysis. We constructed our independent variables as following. For internal stakeholder pressure we calculated the weighted sum of the employee concerns variables from the KLD database. We changed our variable of local external stakeholder pressure which we previously measured by the number of local NGOs and we use now the weighted sum of the local community concerns data from the KLD database. In order measure global external stakeholder pressure we calculated again the weighted sum of the human concerns variables from the KLD database. Our results are robust, we obtained similar conclusions as previously. The only difference we could observe in the significance of the positive relationship between our new measure of local community pressure and innovative CSR, here it is only significant on $p<0.1$ level while in our previous regression in Table 3 using local NGOs we find a stronger positive relationship on $p<0.01$ significance level.

2.6 Conclusion

In this study we analyze the relationship between geographically distant institutional pressures and, the altruistic and innovative CSR actions of the firms.

Firms face pressure coming from internal and external stakeholders to behave ethical and responsible as a result of the increased societal requirements. In previous research in CSR and institutional theory the increased pressure on firms coming from distinct sources from institutional actors is often discussed (Marquis et al., 2007; Porter and Kramer, 2006). Also, the motivation of firms and the strategies that firms apply to engage in CSR is often the center of discussion (Carroll, 1991; Margolis and Walsh, 2003). In our study we extend this discussion and fill an important research gap by introducing the geographical distance of institutional pressure to analyze CSR actions of the firms - we identified internal and external institutional pressures -. The geographical aspect of institutional pressures is important because firms depending on the location of the pressure react differently. We argue that firms in order to respond to these pressures will use either altruistic or innovative CSR actions depending on the visibility, cost structures and time conditions of each actions type towards the pressure groups.

In our study we found confirmation that firms apply altruistic CSR actions when the institutional pressure is coming from external stakeholder groups - local or global -. Whereas we also found support for firms investing in innovative CSR actions when the pressure comes from internal stakeholder groups - employees - or from local external stakeholder groups – NGOs -.

Our findings have several implications for managers. This study helps to develop a better understanding about the structure of CSR that is crucial for a successful firm. First, when a firm decides to invest in CSR it has to be aware of a proper typology among these actions. For this reason we provide our own CSR typology that separates altruistic and innovative CSR actions. Altruistic CSR differs from innovative CSR in its visibility, cost structure and time conditions towards stakeholder groups and accordingly may provide distinct social and economic benefits for the firm. Therefore, a firm has to evaluate properly the relationships with its geographically distant stakeholder groups and choose a correct CSR action. In this way firms will not only be able to tighten important institutional ties, but also gain legitimacy from the society for a long term commitment.

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Chapter 3

Measuring the tangible outcomes of CSR: Linking CSR to firm performance and advertising

Abstract

Prior literature has not reached an agreement on the effect of corporate social responsibility (CSR) on firm performance. In this paper we show that CSR contributes negatively to firm performance if using ROA, ROE, ROS and Tobin's q. On the other hand, CSR contributes positively to the advertising effects of the firm if using trademark introduction as our dependent variable. Our findings are robust.

Keywords: Advertising effort; CSR; Firm performance.

3.1 Introduction

Social responsibility has been often studied in the context of public companies (McWilliams and Siegel, 2000; Waddock and Graves, 1997). Researchers reviewed theoretical and empirical implications of CSR investments to observe their potential benefits. However, prior studies analyzing the CSR - firm performance link have not reached an agreement. In some cases prior studies found a positive (Berman et al., 1999; Waddock and Graves, 1997), in other cases a neutral (McWilliams and Siegel, 2000) and again various studies reported a negative relationship (Vance, 1975) between the two variables.

This lack of consensus about the potential financial benefits of CSR makes a central question even more urging for firms: How can CSR contribute to the firms' survival? This is a critical issue for firms because they face a growing pressure from stakeholder groups representing diverse interests and hereby creating a challenge for firms to make investment decisions about CSR.

Nevertheless with these issues firms also have to face other uncertainties. These uncertainties are related to the conflicting views about the extent to which firms are expected to engage in responsibilities towards the society. These misalighnments in views are grounded in the diversity of the theoretical backgrounds connecting firm business actions to socially responsible actions. Such as for instance, stakeholder theory (Freeman, 1984), institutional theory (DiMaggio and Powell, 1983) resource based view of the firm (Barney, 1991) and an economic perspective of profit maximization (Friedman, 1970). For these reasons firms have to deal with a complex issue where CSR still remains embedded in an unfolded context.

In this study we aim to analyze the relationship between corporate social responsibility (CSR) and the financial and advertising outcome measures on the firm level. Our objective is to find evidence about the ability of CSR to contribute to the competitive advantage of the firms.We discuss the prior empirical literature on the CSR - firm performance link and extend it by using a variety of measures to develop a clear understanding about CSR investments and the potential outcomes of those.

In our empirical setting we use a panel dataset including 132 of the largest U.S. based firms taken from the S&P 500 firms list during a nine year period from 2000 to 2008. In order to create our dataset we used data from four secondary databases, which are, 1) the Kinder, Lyndenberg and Domini (KLD) database to measure social responsibility of the firms;2) the Fortune magazines America's Most Admired Companies (AMAC) list to obtain data on the reputation of the firms; 3) the United States Patent and Trademark Office (USPTO) online database for data on new trademark introduction and 4) the Compustat database to obtain financial data on the firm level. Our findings show a negative relationship between CSR and firm performance and a positive relationship between CSR and the advertising efforts of the firms. We argue that a negative relationship between CSR and firm performance can have various explanations and does not suggest that firms should not invest in CSR actions. The positive relationship between CSR and the advertising efforts of the firms we explain by that CSR is closely tied to the intangible outocmes of the firms (e.g. repuation, branding, marketing) and will show a positive effect when directly linked to these outcomes. We discuss our empirical setting more in detail and give an extensive explanation about our findings in the following sections. In section one we review the prior empirical literature on the CSR - firm performance link; in section two we describe our data and methodology; in section three we state our hypotheses; in secton four we discuss our results and finally in section five we conclude.

3.2 Literature review

As we referred to it in the previous section of introduction, firms face a complex decision making process when they invest in CSR activities, which is also reflected in the prior literature on CSR (Orlitzky et al., 2003; Peloza, 2009). Factors such as measurement difficulties of the outcomes, opposing stakeholder interests, unclear definitions, and differing perceptions about firm responsibilities towards the society influences the complexity of investing accurately in CSR. For these reasons we believe that it is highly relevant to study the outcomes of corproate social responsibility.

However prior literature addressed the CSR-firm performance link (Hull and Rothenberg, 2008; McWilliams and Siegel, 2000; Waddock and Graves, 1997) no agreement has been achieved about a consistent relationship between the two variables. The mixed results in the sign of the relationship between CSR and firm performance can be observed not only in those research studies that use different data sources to measure CSR, but also in those studies that used the same (Ullman, 1985). The differences can be due to various issues, such as using a variety of methods, time frames, firm samples or the set of control variables included in the regression analysis. The reasons of the lack of a common consensus about a steady relationship are often argued among researchers.

In this section we review the findings of prior empirical studies and their arguments about the link between CSR-firm performance in order to give a deeper insight on the problem presented in the current paper. We structure our literature review by separating prior studies by their findings. We separate studies that found a positive, a neutral or a negative relationship between CSR and firm performance. Additionally, we also discuss the relationship between CSR and a different outcome measure which is new trademark introduction and we use it as a proxy for the advertising efforts of the firms.

3.2.1 Positive relationship between CSR and firm performance

Prior studies which argue a positive relationship between CSR and firm performance base their beliefs on the capability of CSR to strenghten firm competitive advantage and the fact that it provides higher financial benefits than the costs incurred. The paper by Waddock and Graves (1997) is one of the most influential works which supports this ideology and analyses the CSR-performance link. The authors found a positive relationship between CSR and firm performance. The study uses data from the KLD database to measure CSR applying a weighted measure constructed by an expert panel of researchers and Compustat data to meaure ROA, ROE and ROS, all three are acounting measures of firm performance. The authors also control for firm size, risk and industry that can influence the relationship. In their results the authors found a positive relationsip also about the reverse causality between CSR and firm performance (firm performance$_{t-1}$ - CSR$_t$ and CSR$_{t-1}$ - firm performance$_t$).

An important study by Berman et al. (1999) also examined the relationship of CSR to firm financial performance. The authors used the same database to construct their measures of CSR as in the previously mentioned study by Waddock and Graves (1997).

However the study of Berman et al. (1999) takes into account five stakeholder categories from the KLD database and introduces them simultaneously in their regression analysis to observe their individual effects on financial performance of the firms. Their measure of CSR represents five categories, namely, employees, diversity, local communities, environment, and product. The results showed that only two of the five CSR categories, the employees and the product categories, have a direct positive effect on firm performance when controlling for the strategic environment of the firms.

A meta-analysis of 52 studies by Orlitzky et al. (2003) focused on the CSR-performance link across studies to find evidence about the consistency of the sign in the analyzed studies. The authors reported an overall positive relationship between the two variables and clearly rejected a negative relationship between them.

3.2.2 Neutral relationship between CSR and firm performance

Beside the prior studies reporting a direct positive relationship between CSR and financial performance a series of other studies found neutral or negative relationships between the two variables. Arguments for a neutral relationship between the two variables usually argue that there are other factors which influence a direct effect of CSR on performance and that CSR is not directly related to financial perfromance. Building on the findings of Waddock and Graves (1997) a study by McWilliams and Siegel (2000) found no relationship between CSR and firm performance when controlling for the firms R&D expenditure and the advertising expenses. An indirect relationship between the two by exploring mediator or moderator effects of various factors was also addressed before.

An influential study by Surroca et al. (2010) show that intangible resources measured by innovation, human capital, and culture fully mediate the relationship between CSR and firm performance. While Luo and Bhattacharya (2006) looked at the mediating role of customer satisfaction and the moderating effect of corporate abilities on the relationship between CSR and the firm market value. In their model CSR was fully mediated by customer satisfaction and found mixed results for the moderating effect of corporate abilities on CSR and firm performance.

3.2.3 Negative relationship between CSR and firm performance

In those studies that predicted a negative relationship between CSR and firm performance the main arguments rely on the economic baseline thinking that the firms only social responsibility is to increase profits (Friedman,1970). Researchers argue three main issues in the economic field why firms should not engage in CSR actions (Margolis and Walsh, 2003). First they point out that firms by maximizing their profits fulfill their obligations to the societal welfare; second that to take care of the economically disadvantaged is the governments role and; third, that firm engagements in CSR actions should be clearly communicated to the shareholders as a possible generator of negative income (Margolis and Walsh, 2003).

If we assume that the firms goal is to maximize their profits then in order to look at social responsibility as a resource that contributes to the competitive advantage and the performance of the firms it should be economically measurable. However those researchers who believe that CSR has a negative effect on firm performance argue that the financial benefits of CSR are lower then the costs incurred and that there are no tangible financial outcomes of CSR that could be measured to exceed the costs of investments in such actions.

A newspaper article in the Wall Street Journal (WSJ) by Aneel Karnani in 2010 gives strong arguments of firms motivations to invest in social responsibility which is not to 'do good' but to increase firm profits. Karnani (WSJ, 2010) argues that firms mask their profit maximizing intentions with CSR but in fact firms involve themselves in such actions only to increase their financial benefits. Which means that firms remain interested in increasing social welfare only until the point where they can also generate profit from it and therefore it might be the case, that the society's expectations about firm CSR involvements are not coherent. Some firms are able to increase their profits by doing good, but in many cases they are not which will force them to give up a part of their profits.

A study by Freedman and Jaggi (1982) found a negative association between firms pollution performance and firm financial perfromance, coherent with the above described view.

3.2.4 Relationship between CSR and intangible outcomes

As we mentioned it before, in our current paper we look at two types of outcome measures regarding CSR. First, we examine the link between CSR and firm performance and second, we look at the relationship between CSR and advertising efforts of the firms. Advertising efforts are the outcomes of firms' investments in advertising. In our study we measure advertising efforts by trademark filing data on a yearly basis between 2000 and 2008, which we obtained from the USPTO database. We look at the relationship between CSR and the advertsing efforts of the firms to show that CSR actions are directly tied to the intangible outcomes of the firms. Intangible outcomes can be for instance an increase in reputation, trust or stronger firm or brand indentity.

In prior research, data on trademark introduction was used either to proxy for innovation outcome (Malmberg, 2005) or for advertising outcomes (Fosfuri and Giarratana, 2009). Malmberg (2005) reported that trademarks can be good predictors of new-to-the firm innovations and most significantly if the firms are selling consumer goods. Fosfuri and Giarratana (2009) used data on filed trademarks to measure new advertising efforts of firms. In their findings they show that new advertising is related to the firms' financial market value through market size effects.

In our current study we claim that CSR actions of the firms support advertising efforts in a positive way. We believe that CSR can contribute to the creation of a valuable firm image and therefore it will be positively related to the advertising efforts of the firms. CSR should reinforce the advertising efforts of the firms.

3.3 Hypotheses

Our aim is to observe the relationship between CSR and financial and advertising outcome measures on the firm level, to see whether CSR contributes to the tangible and intangible beneifts of the firms. As we discussed it in the literature review section, prior research found mixed results about the sign and significance of the relationship between CSR and firm performance (Freedman and Jaggi, 1982; McWilliams and Siegel, 2000;Waddock and Graves, 1997). Therefore in order to observe an existing relationship between CSR and firm performance, we hypothesize all the three possibilities that were reported in prior studies:

H1a: *CSR is postiviely related to firm performance.*

H1b: *CSR is not related to firm performance.*

H1c: *CSR is negatively related to firm performance.*

We hypothesize that there exist a positive relationship between the CSR actions and the advertising efforts of the firms which we measure by trademark introduction. With this relationship we want to highlight the intangible benefits of CSR to the firm that are not captured when CSR is directly linked to firm performance. We hypothesize that:

H2: *CSR is positively relted to the advertising efforts of the firm.*

3.4 Data and Methodology

3.4.1 Data description

In order to analyze the relationship between CSR and different outcome variables we use a set of 132 companies (1056 firm year observations) from the S&P 500 list of largest U.S. companies. We created a panel dataset of nine years from 2000 to 2008 using four databases. Namely the KLD, the USPTO, the Fortune's Most Admired Companies and the Compustat databases.

We use firms from the S&P 500 list in order to capture the largest investments in CSR among publicly traded firms. We constrain our firm sample to 132 firms because of the restrictions of the data availability across the three above mentioned databases in the nine years period from 2000 to 2008.

Dependent variables: To measure the financial performance of the firms we use a variety of measures. We assess the following accounting measures. Return on assets ('ROA') is measured as the ratio of net income to total assets of the firms. This financial measure of firm performance is widely used in the management literature (Waddock and Graves, 1997; Orlitzky et al., 2003). Our measures of return on equity ('ROE') representing the ratio of net income to shareholders equity and return on sales ('ROS') the ratio of net income to sales are two alternative financial measures that we use in our regression analysis. We obtained the data to create our measures, ROA, ROE and ROS from the Compustat North American database. We also mesaure the market value of the frims with our dependent variable of 'Tobin's q'. We constructed our measure of Tobin's q as indicated in Surroca et al. (2010). To measure the branding effort of the firms we use data on new trademark introduction from the USPTO database and created our dependent variable 'TM Intro'. We collected the number of newly filed trademarks for each firm on a yearly basis.

Independent variable: In order to measure CSR we use data from the KLD database. This database is widely used among researchers to measure CSR (Waddock and Graves, 1997; McWilliams and Siegel, 2000; Surroca et al. 2010). The database has seven major issue areas: community, corporate governance, employees, diversity, environment, human rights, and product and provides information on firm involvement in six controversial business issues: alcohol, gambling, firearms, military, nuclear power, and tobacco. For our study we focus on the seven major issue areas of the database. Each issue area has strengths and concerns variables expressed as binary 0/1 variables.We construct our measure of CSR by summing the strengths variables from all seven issue areas of KLD: community, corporate governance, employees, diversity, environment, human rights and product. We take the one year lag (t-1) of our independent variable to interact it with the dependent variables in time t.

Control variables: We control for the size of the firms by measuring the log of firms total assets ('Size'). This measure was applied by prior studies (Waddock and Graves, 1997; McWilliams and Siegel, 2000). We expect that the size of the firm is negatively related to firm performance. We also control for innovation, firm risk, reputation, previous financial performance, and time effects. For innovation, we control for using the ratio of the R&D expenditure of the firms to the total number of employees ('Innovation'). Innovation was previously found to be positively related to firm performance (McWilliams and Siegel, 2000; Hull and Rothenberg, 2008) and therefore it is important to control for it in order to avoid inconsistent findings about the effect of CSR on firm performance. Firm risk was introduced in our regression analysis as a control variable as prior studies to control for the extent to which firms are willing to invest in CSR actions. We measure risk ('Risk') as the ratio of firm debt to its total assets. We obtained data on the reputation of the firms from the Fortunes magazines America's Most Admired Companies list. The Fortune magazine's measure of reputaiton is commonly used at the company level to control for reputational factors ('Reputation'). Previous financial performance controls for the fact that CSR investments of large firms might reflect good financial performance in the previous period ('ROA_{t-1}'; 'ROE_{t-1}'; 'ROS_{t-1}'). We take a one year lag (t-1) of our control variables to interact them with the dependent variables in time t.

3.4.2 Model selection

We use regression analysis to test the relationship between CSR and the outcome variables described in the previous sections. We use OLS regression analysis to introduce the accounting financial measures as the dependent variables (ROA, ROE, ROS and Tobin's

Variables	Mean	Std. Dev.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1.ROA	5.96	9.29	1															
2.ROE	18.24	35.31	0.596***	1														
3.ROS	0.51	0.24	0.796***	0.422***	1													
4.Tobin's q	13.41	39.02	-0.0135	-0.0527	-0.0359	1												
5.TM Intro	19.49	42.78	0.107***	0.0607*	0.0616*	-0.0522	1											
6.CSRt-1	4.37	3.51	0.0514	0.00894	0.0750*	-0.0911**	0.195***	1										
7.Public CSRt-1	2.95	2.61	0.0854**	0.0567	0.0947**	-0.0942**	0.217***	0.942***	1									
8.Non-P. CSRt-1	1.42	1.38	-0.0302	-0.0847**	0.0124	-0.0545	0.0894**	0.773***	0.517***	1								
9.Reputationt-1	0.36	0.87	0.125***	0.118***	0.0936**	-0.0223	0.0647*	0.179***	0.168***	0.139***	1							
10.Innovationt-1	-5.77	1.21	-0.0504	-0.131***	0.00138	0.136***	0.0158	0.117***	0.101**	0.109***	-0.136***	1						
11.Sizet-1	9.55	1.95	0.0452	-0.00403	0.0874**	-0.0839**	0.0614*	0.459***	0.430***	0.361***	0.256***	-0.162***	1					
12.Riskt-1	0.17	0.12	-0.181***	0.0967**	-0.129***	-0.194***	-0.00487	-0.00645	0.0160	-0.0468	0.00965	-0.332***	0.0128	1				
13.ROAt-1	6.31	8.81	0.632***	0.371***	0.496***	0.0134	0.0953**	0.0837**	0.110***	0.00500	0.109***	-0.0400	0.0528	-0.179***	1			
14.ROEt-1	18.34	32.48	0.370***	0.476***	0.253***	-0.0412	0.0446	0.0239	0.0752*	-0.0813**	0.106***	-0.131***	0.00731	0.121***	0.576***	1		
15.ROSt-1	0.05	0.23	0.498***	0.249***	0.523***	-0.0114	0.0550	0.0922**	0.108***	0.0319	0.0782*	-0.0141	0.0922**	-0.119***	0.792***	0.411***	1	
16.TM totalt-1	34.22	81.01	0.102***	0.0599	0.0608*	-0.0578	0.935***	0.182***	0.219***	0.0503	0.0408	0.0532	0.0470	0.00902	0.0949**	0.0468	0.0549	1

q). Giving that our variable 'TM Intro' is a count dependent variable, we use negative binomial regression to analyse the relationship between CSR and trademark introduction. Because the mean and variance equality required for a Poisson model does not hold in the case of our dependent variable 'TM intro' we applied negative binomial regression analysis (Greene, 2002). After conducting the Hausman-test we applied firm and time fixed-effects estimations through our analysis.

3.5 Results

We present the descriptive statistics of mean and standard deviation and the correlation matrix of our variables in Table 1. The Pearson correlation coefficients are presented on three significance levels of the p-value ($p<0.01$***, $p<0.5$** and $p<0.1$*). From the correlation matrix we can see that CSR has a direct effect on $p<0.1$ level of significance on return on sales (ROS) and on $p<0.01$ level of significance on new trademark introduction (TM Intro).

Table 1: Descriptive statistics and correlation matrix ***p<0.01, **p<0.05, *p<0.1

We show the results of Hypotheses 1a;b;c and Hypothesis 2 in Table 2. We used fixed-effects OLS regression to analyze H1a;b;c and we used fixed-effects negative binomial regression to analyze H2. The results of our regression analyses demonstrate that CSR negatively affects firm performance across different performance measures (ROA; ROE; ROS; Tobin's q) confirming Hypothesis 1c and by this rejecting Hypotheses 1a and 1b. As we discussed it in the literature review section, this negative relationship is argued by the firms perception of CSR as a cost generated (Friedman, 1970; Karnani, 2010 WSJ). This finding can have several explanations. First, one explanation can be of why CSR actions of the firms are negatively related to perfromance is because firms invest in social projects that will show a positive strategic outcome over a longer period of time that we do not cover in the present study. These new socially responsible project or product innovations take time to show their profit generating benefits and are initially percieved as a cost for the firms. An other explanation for a negative relationship can be that firms are reacting more quickly to stakeholder pressures with investing in altruistic CSR in form of cash donations which do not have a direct impact on firm performance and are percieved as a cost. We argue that our finsing of a negative relationship between CSR and firm performance does not imply that firms should not invest in CSR, but rather suggest that they have to follow a strategic path that is financially benefitial both, to the firm and to the society as well. Firms should not engage in social actions because of purely altruistic motives because it will negatively influence their performance, but firms should consider CSR as an opportunity to enhance performance in a socially responsible way.

The findings confirm our hypothesis about the relationship between CSR and the advertising efforts of the firms (H2). We find a positive relationship between the two variables which is consistent with our previous argument that CSR is a support mechanism for the firm to enhance other types of firm level outcomes than performance by contributing for instance to their advertising outcome.

In Table 3 we show the results of the robustness check of our regression analysis. We changed our independent variable and applied now the weighted sum of the CSR variable that we used in our previous regression from the KLD database. Our results are robust, we obtained similar outcomes as previously shown in Table 2.

We would also like to highlight some of our results related to our control variables. For instance our measure of 'Innovation' is positively related to firm performance (ROA; ROS). The size of the firms is negatively related to firm performance and positively related to trademark introduction, that is the larger the firm the more trademark it files. And we also observe that prior perfromance (t-1) is positively related to the present perfromance (t).

Table 2: Estimation results of the impact of CSR on different outcome measures.

	Model 1.	Model 2.	Model 3.	Model 4.	Model 5.
	ROA	ROE	ROS	Tobin's q	TM Intro
CSR	-0.553***	-1.339**	-0.0119***	-1.369**	0.0188*
	(0.149)	(0.602)	(0.00459)	(0.634)	(0.0114)
Reputation	0.378	1.941	0.00889	-2.283	0.0120
	(0.333)	(1.344)	(0.0102)	(1.414)	(0.0266)
Innovation	2.121**	5.261	0.0639**	3.690	-0.0814
	(0.882)	(3.549)	(0.0272)	(3.751)	(0.0518)
Size	-0.648*	-2.631*	-0.0177*	-4.946***	0.0449*
	(0.337)	(1.363)	(0.0104)	(1.434)	(0.0251)
Risk	-7.203**	-1.577	-0.0512	37.84***	-0.151
	(3.394)	(13.65)	(0.104)	(14.43)	(0.297)
ROAt-1	0.344***			0.111	-0.0368
	(0.0329)			(0.140)	(0.0292)
ROEt-1		0.122***			
		(0.0338)			
ROSt-1			0.235***		
			(0.0331)		
TM total					0.00243***
					(0.000195)
Time dummies	Yes	Yes	Yes	No	Yes
Constant	21.13***	68.78***	0.557***	84.91***	0.094
	(5.729)	(23.15)	(0.177)	(24.36)	(0.376)
Observations	1,056	1,056	1,056	1,056	1,048
R-squared	0.216	0.053	0.112	0.038	
df_m	144	144	144	144	14
F	19.32	3.946	8.880	2.750	
Wald $chi^2(14)$					177.16

Note: Standard errors in parentheses. Significance levels *** p<0.01, ** p<0.05, * p<0.1

Table 3: Estimation results of the impact of CSR on different outcome measures.(Robust)

	Model 1.	Model 2.	Model 3.	Model 4.	Model 5.
	ROA	ROE	ROS	Tobin's q	TM Intro
CSR	-4.349***	-1.037**	-0.0892***	-7.382*	0.148*
	(1.028)	(0.416)	(0.0317)	(4.384)	(0.0783)
Reputation	0.359	1.900	0.00854	-2.273	0.0124
	(0.332)	(1.343)	(0.0102)	(1.416)	(0.0266)
Innovation	2.115**	5.258	0.0639**	3.732	-0.0821
	(0.880)	(3.546)	(0.0272)	(3.755)	(0.0518)
Size	-0.648*	-2.631*	-0.0177*	-4.927***	0.0442*
	(0.337)	(1.362)	(0.0104)	(1.435)	(0.0251)
Risk	-6.918**	-0.812	-0.0450	38.26***	-0.168
	(3.387)	(13.65)	(0.104)	(14.45)	(0.298)
ROAt-1	0.342***			0.113	-0.0357
	(0.0328)			(0.140)	(0.0292)
ROEt-1		0.121***			
		(0.0338)			
ROSt-1			0.235***		
			(0.0330)		
TM total					0.00245***
					(0.000195)
Time dummies	Yes	No	Yes	No	Yes
Constant	21.29***	69.13***	0.559***	83.79***	0.0913
	(5.715)	(23.12)	(0.177)	(24.37)	(0.376)
Observations	1,056	1,056	1,056	1,056	1,048
R-squared	0.220	0.055	0.114	0.036	
df_m	144	144	144	144	14
F	19.72	4.049	8.988	2.605	
Wald $chi^2(_{15})$					179.23

Note: Standard errors in parentheses. Significance levels *** p<0.01, ** p<0.05, * p<0.1

3.6 Conclusion

In our current study we aim to analyze the relationship between CSR and different outcome measures on the firm level. As prior empirical studies found mixed results on the CSR-firm perfromance link (Margolis and Walsh, 2003) we find it highly relevant to further explore this relationship. We use a variety of measures to examine how CSR affects firm performance and moreover we also introduce the outcome measure of advertising outcomes, measured by the filed trademarks of the firms.

Our firm sample consists of 132 firms from the S&P 500 list of largest U.S. firms and covers nine years from 2000 to 2008. We collected data from a variety of databases, such as the KLD database, the Compustat, the USPTO databases, and the Fortunes Most Admired Company list. Our results show that CSR is negatively related to firm performance suggesting that firms percieve CSR actions as a cost. This result can have various explanations and do not necessarily suggest that firms should not invest in CSR. In our view this can be understood as the confirmation of the firms needs to better align their strategies with their CSR actions and to invest in actions that are mutually benefitial for the firm and for the society. We also find that CSR is positively related to the advertising outcome of the firm which reinforces our believes about that CSR works as a support system in the communication of the firms' advertising efforts towards the stakeholder groups, creating a valuable corporate image.

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